

REMARKS / ARGUMENTS

Claims 9-11, 14, 16 and 17 are pending. Claims 1-8, 12-13 and 15 have been canceled. By the foregoing amendment claims 9, 10 and 16-17 are amended. No new matter is added by the amendments. The amendments are supported by the specification as filed.

This amendment includes a response to the Notice to Comply mailed August 19, 2005. The Notice to Comply requires Applicants to prove the sequence listing information of the cited sequence AJ242651 in the specification and claim 9. In response, Applicant requests that the Examiner enter the attached paper copy substitute Sequence Listing including SEQ ID NO: 30 and consider the arguments and remarks below.

The attached substitute Sequence Listing contains no new matter. Indeed, it is supported by the application as originally filed. As is discussed in further detail hereinbelow, SEQ ID NO: 30 is the prior art sequence for the HCV genome (EMBL AJ238799) and is not new matter because it is incorporated by reference in the present application by virtue of the reference to Lohmann et al., SCIENCE, 2 July 1999, Vol. 85, 110-113 ("Lohmann et al.") and the applicant clearly had possession of the specific glycine to cysteine substitution having regard to teachings in Example 5 and Figure 5B. Entry of SEQ ID NO: 30 in the new Sequence Listing is proper.

Also included herewith are two diskettes, each containing the Sequence Listing in computer readable form (CRF). Pursuant to 37 C.F.R. § 1.821(f), the undersigned states that the Sequence Listing content of the paper copy and the computer readable form (CRF) contained on the diskettes are identical.

In view of the foregoing, Applicant submits that the requirements under 37 C.F.R. §§ 1.821-1.825 have been met and the items required in the Notice to Comply have been provided.

In the Office Action on page 3 claims 9-11, 14, 16 and 17 stand rejected under 35 USC §112, second paragraph as indefinite. The accession number in claim 9 is asserted by the Examiner as being subject to change, and the examiner has suggested specifying the molecular structure in a SEQ ID NO. By the foregoing amendment to claim 9 replacing the expression "EMBL genebank accession No. AJ242651" with "SEQ ID NO: 30" and the SEQ ID NO:30 submitted in this amendment applicants submit the rejection of all pending claims is overcome.

A brief explanation of SEQ ID NO:30 is useful. The sequence of SEQ ID NO: 30 is not the sequence of EMBL genebank accession no AJ242651 previously recited in claim 9 but rather

the sequence of EMBL genebank accession no. AJ238799. AJ238799 is the sequence of the prior art complete HCV genome, whereas AJ242651 is a portion of the complete genome, namely, the sequence I377/NS2-3'. Both accession nos are described in the attached Lohmann et al. reference: end-note 7 (last 4 lines) refers to EMBL AJ238799 and end-note 12 (third-last line) refers to AJ242651. Lohmann et al. is referred to throughout the specification as filed, for example Background page 4 (last paragraph); Summary of Invention page 6 (2nd paragraph); Description of Drawings page 7 (Fig 1); and Description (pages 28 and 29). The Lohmann et al. reference is incorporated by reference by the general statement at the last paragraph of the description.

The HCV polypeptide fragments of SEQ ID NO: 2, 4, 5, 6, and 7 described in the application are all colinear with the HCV polypeptide fragment of EMBL AJ242651. All of these polypeptide fragments begin with a methionine residue conventionally referred to as amino acid position 810 from the complete HCV polypeptide sequence. This numbering system is described in the specification: Figure 5B illustrates the claimed glycine to cysteine residue replacement of G(2042)C in each of replicons of SEQ ID NOS: 2, 4, 5 and 7. The brief description of the drawings at page 9 states "Figure 5B: amino acid numbers are numbered according to the full length HCV polyprotein with the first amino acid in the second cistron corresponding to amino acid 810 in NS2 of I377/NS2-3 construct". Thus the amino acid substitution in Figure 5B G(2042)C is numbered with reference to the full length HCV polypeptide, namely AJ238799.

Further, Example 5 immediately preceding Table 1 (page 22) states:

there is also an adapted mutation C to G/R at amino acid 2042 (**shown as amino acid 1233 in the sequence listing since a.a. 810 of NS2 is numbered as a.a. 1 in SEQ ID NO**) that can be found in **all clones analyzed**.

Thus, the glycine to cysteine substitution recited in the claims correctly reads **G(1233)C**, i.e. 2042-809=1233, if the residue positions are counted from AJ242651 as currently recited (or from SEQ ID NO 2, 4, 5 and 7, namely any of the disclosed replicons having the recited substitution).

In view of the foregoing withdrawal of the rejection is requested.

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Applicants note the present amendment includes subject matter that was previously deleted erroneously from claims 9 and 10 while curing a procedural defect. This subject matter was not deleted in response to an art based rejection and is properly included in the claims.

In the Office Action on page 3, paragraph 8, claims 16 and 17 stand rejected as being written in improper dependent form. In view of the foregoing amendment Applicants submit this rejection is overcome.

Applicants submit the application is now in condition for allowance. Entry of the amendment is respectfully requested.

In view of the foregoing, it is respectfully submitted that the subject application is in condition for allowance and such favorable action is respectfully requested. The Commissioner is hereby authorized to charge any fee which may be required, and to credit any overpayment, to Deposit Account No. 11-0223.

Respectfully submitted,

s/Timothy X. Gibson/

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